

HIGHER ACCURACY PRESSURE BASED FLOW CONTROLLER

Abstract

A mass flow controller is disclosed and includes body portion having a first internal passage and at least second internal passage formed therein, a flow control valve coupled to the body portion and in communication with the first and second internal passages, at least one pressure transducer coupled to the body portion and in communication with at least one of the first internal passage, the second internal passage, and the flow restrictor, a nonlinear flow restrictor configured to produce a high compressible laminar flow therethrough coupled to the second internal passage, a thermal sensor in communication with at least one of the first internal passage, the second internal passage, and the flow restrictor, and an exhaust vessel in communication with the flow restrictor.